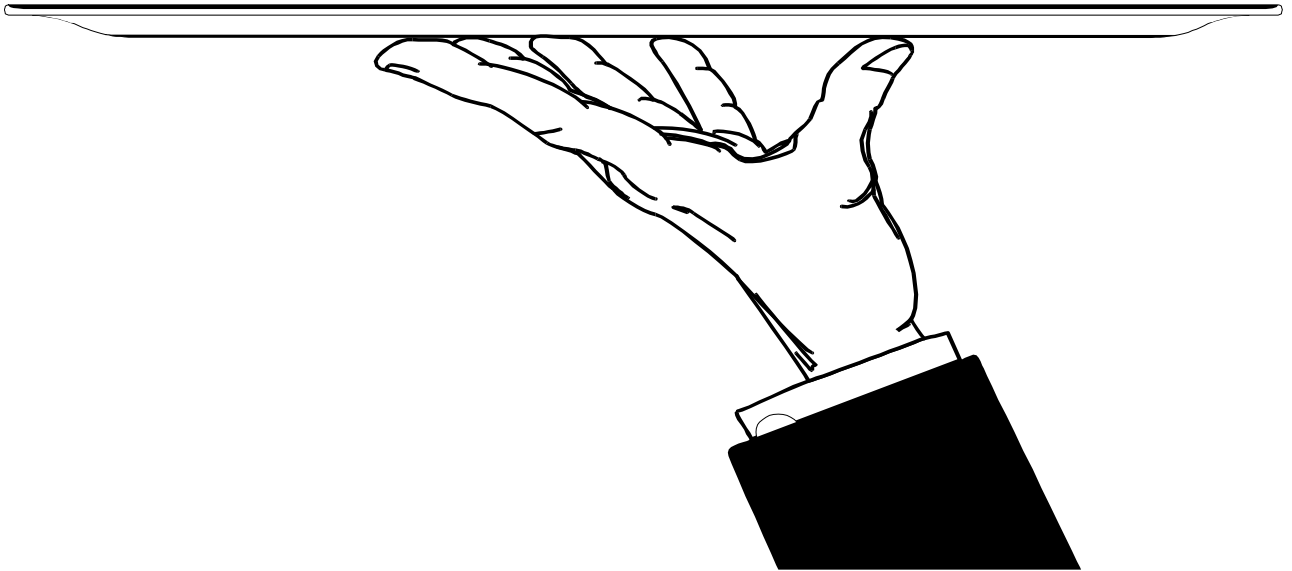


SHOW YOU KNOW

A Self-education Program For Food Service Workers



Denver Department of Environmental Health
Division of Public Health Inspection
201 W. Colfax Ave., Dept. 1009
Denver, CO 80202
720-865-5401
www.denvergov.org

Dear Owner, operator, manager and staff:

It is very important for you to take responsibility to use good food safety in your daily work, to assure that you are providing safe food to the public, and to comply with the City and County of Denver Retail Food Establishment Regulations.

You and your staff are required to have an acceptable level of knowledge about food safety. During your inspection, you and your staff will be asked important questions about the safe handling of food. The inspector will ask questions to several employees to evaluate the level of knowledge of the staff and overall operation. The questions will be job specific, and pertain to tasks being performed at the time of the inspection. You and your staff must be able to demonstrate your knowledge through verbal response or actual demonstration. If any employee is unable to demonstrate safe food handling practices, it will result in a critical violation on your inspection report. You will be expected to take action to correct this situation. The inspector can be of assistance by offering suggestions on improvement for compliance. You are expected to seek on-going training and continue to monitor the operation in its entirety, including staff practices, to ensure the public is consuming safe food. Acceptable sources of education can be found through several organizations, including this department. Some of these are listed in the back of this booklet.

In this booklet, you will be provided with information you will be responsible for knowing and practicing every day. You will find a self-test at the end of this booklet that will help you determine the knowledge and training requirements for the operation.

You need to show that you know:

- § When to wash your hands
- § Where to wash your hands
- § How to wash your hands
- § How to use gloves correctly
- § When you are restricted from handling food
- § What the safe temperatures are for food
- § How to use a thermometer
- § How to calibrate a thermometer
- § What is a potentially hazardous food
- § How to prevent food from becoming contaminated
- § How to Clean
- § How to Sanitize

Why should you keep food safe?

Eating food that is contaminated with harmful germs such as E. coli 0157:H7, Hepatitis A or Salmonella can make someone sick. A person who has gotten sick from unsafe food can have explosive or bloody diarrhea, projectile vomiting, headaches, muscle aches and spontaneous abortions. There may be more severe consequences that require hospitalization and can lead to temporary or permanent health conditions or death.

The very young and the very old are generally most at risk because of weakened immune systems. Others are more vulnerable to foodborne illness due to underlying health problems, infections, pregnancy, diabetes, H IV, heart conditions, organ transplants, or taking chemotherapy for cancer.

Is personal cleanliness important?

Improper personal cleanliness practices cause twenty-five (25%) percent of the illnesses related to food.

When you report to work...

- Your fingernails must be clean and trimmed. False fingernails and nail polish must not be worn since these may break or chip off into a food product.
- You must not be wearing excessive jewelry. It makes personal cleanliness difficult. It can get lost in food or cause injury if caught by hot or sharp objects or equipment.
- Your clothes must be clean and changed daily. If you wear a uniform, wear clean clothes to work and change into your uniform. Uniforms should not be worn to and from work.
- Your apron must be clean. Aprons should be removed when leaving the food preparation area.
- You must have your hair restrained. Hats and hair nets are considered proper hair restraints. Hair restraints are necessary to keep your hands out of your hair and your hair out of the food.
- Bathe daily and use deodorants.

Who needs to wash their hands?

Everyone working in retail food establishments must wash their hands.

HANDWASHING SHALL BE DONE...

Before:

- starting work
- handling food
- handling clean dishes
- putting on a fresh pair of gloves



HANDWASHING SHALL BE DONE...

After:

- using the restroom
- smoking
- eating or drinking
- sneezing or coughing
- break time
- touching anything that can be a source of contamination:
 - telephone, money, soiled linens
 - raw foods, meats, shell eggs, fresh produce
 - handling dirty dishes, equipment, utensils or trash
 - using cleaners or chemicals
 - picking up items off of the floor
- you leave your work area and return to preparing food
- removing dirty gloves
- during work, as often as needed

Clean Hands = Clean Food

Washing your hands properly breaks down the oils and loosens the bacteria so they can be washed away.

How do you wash your hands?

- ☞ Use soap and warm running water
- ☞ Rub your hands vigorously
- ☞ Wash all surfaces, including under fingernails (use a brush to scrub under and around your nails), back of hands & wrists, between fingers and around your nails
- ☞ Rinse well
- ☞ Dry hands with paper towels
- ☞ Turn off the faucets with paper towels

Where do you wash your hands?

You must wash your hands at a hand-washing sink only. Washing your hands in a food preparation or dish-washing sink can contaminate food, dishes, or utensils.

How do you use gloves correctly?

1. Wash your hands thoroughly BEFORE and AFTER wearing gloves, including between glove changes. Bacteria will build up under gloves and should be washed away after the gloves are removed.
2. Wash your hands thoroughly BEFORE and AFTER wearing gloves for handling ready-to-eat food like salads, fruit, sandwiches, cooked meats, and bread.
3. Wash your hands thoroughly BEFORE getting a new pair of gloves from the box, handle the wrist portion of the glove, not the fingertips, and DO NOT BLOW INTO THE GLOVE.
4. Wash your hands thoroughly BEFORE and AFTER changing your gloves when you change your activity (from making sandwiches to making change or taking out the garbage). Dispose of the gloves before you leave your work station. Wash your hands before returning to your work station and before putting on a new pair of gloves.
5. Wash your hands thoroughly BEFORE and AFTER changing gloves after sneezing, coughing or touching your hair, face, or other body parts with gloved hands.
6. Wash your hands thoroughly BEFORE and AFTER changing gloves periodically to minimize the build up of bacteria and food debris on the inside and on the outside of the gloves. Bacteria grow while your hands sweat in the gloves.

Can you work when you are sick?

Inform your supervisor if you have a cold, vomiting or diarrhea. If you have any of these symptoms, you should not be working with food.

What if I have cuts, abrasions, burns or open sores?

Wounds should be covered with a bandage or dressing, and then covered with a disposable glove or finger cot. You must inform your supervisor of all wounds.

What are the safe temperatures for food?

Keeping foods at the correct temperature helps prevent bacterial or germ growth. Bacteria grow best at 41°F to 140°F. Keeping foods higher than 140°F or lower than 41°F will either kill harmful bacteria or prevent them from growing.

When receiving a food delivery, check the temperature of the food.

1. Place the thermometer between two sealed packages to check the temperature. Do not puncture the packages; it will break the seal.
2. Cold food must be 41°F or colder and frozen food must be frozen hard.
3. If the food temperature is not correct or you are unsatisfied with the quality of the food, reject the delivery. Accepting a questionable delivery is accepting responsibility for its condition and accepting it as **SAFE**.

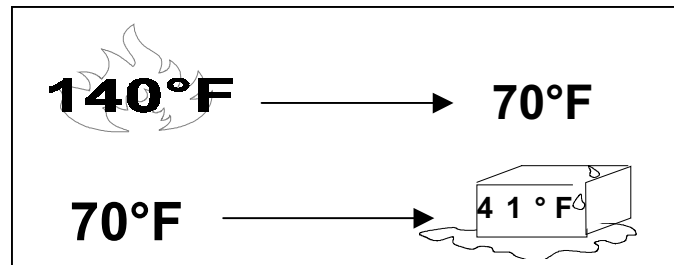
Hold cold food at 41°F or colder, in the refrigerator.

Cook food to the proper temperature:

- Whole cuts of beef and steaks up to 140°F or hotter.
- Fish, seafood, and eggs to 145°F or hotter.
- Ground beef and pork to 155°F or hotter.
- Poultry and stuffed food to 165°F or hotter.

Cool food quickly:

- Cool food from 140°F to 70°F in two hours or less.
- Cool food from 70°F to 41°F in four hours or less.

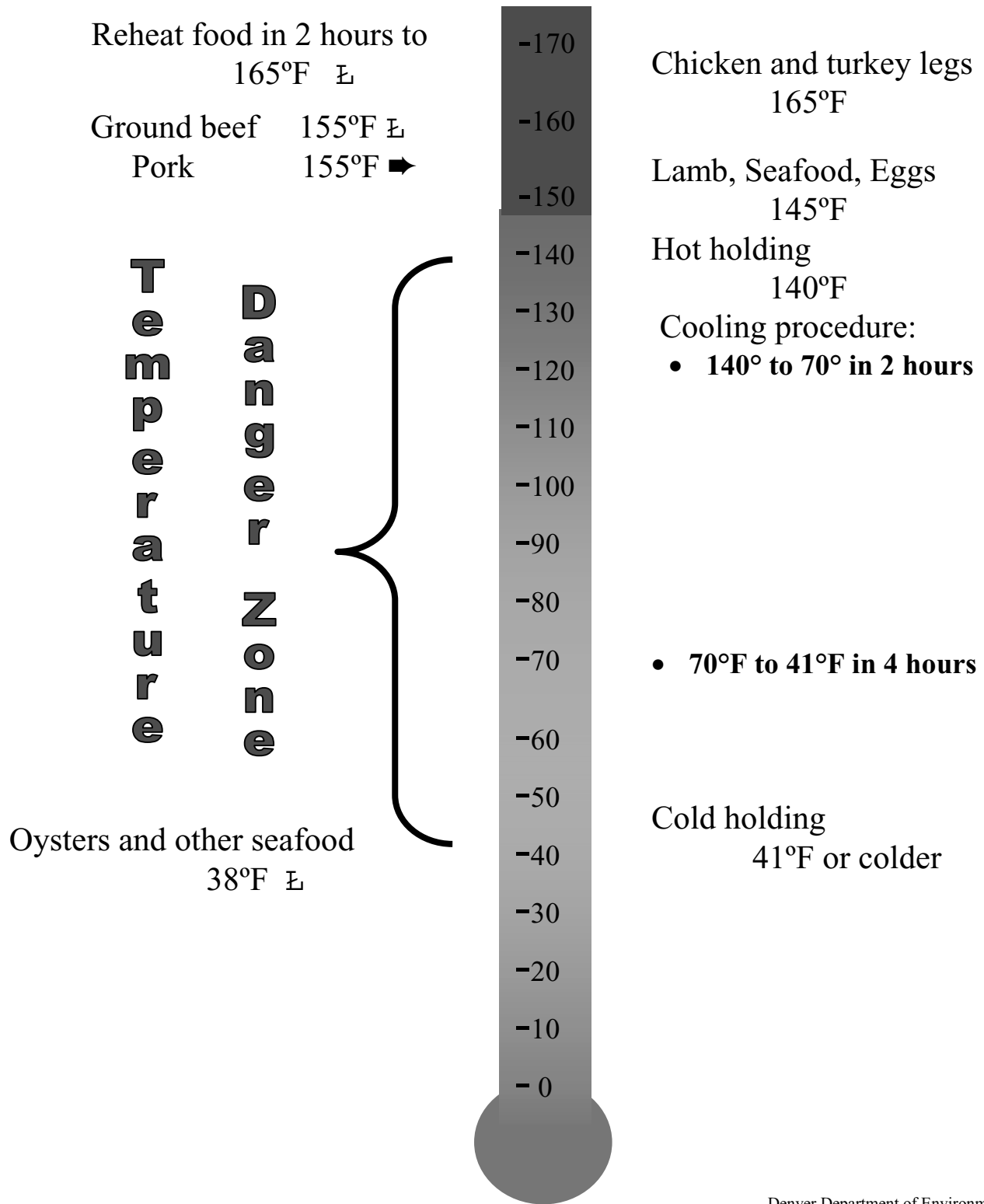


Reheat food to 165°F or hotter.

- Rapidly reheat food or leftovers to 165°F on a stove or other heating device.
- Place the reheated food in a preheated steam table. Steam tables are not to be used to reheat potentially hazardous foods.
- Food that has been cooked and cooled can be reheated only once. Leftovers from reheated food must be discarded.

Hold properly cooked or properly reheated food at 140°F or hotter.

CRITICAL FOOD TEMPERATURES



How do you know if the food is at a safe temperature?

You must have access to a probe thermometer and know how to use a probe thermometer correctly.

How to use a probe thermometer

1. Wash and sanitize the thermometer before and after each use.
2. Stick the probe into the thickest part of the food.
3. Allow time for the thermometer to stabilize.
4. Read the thermometer.

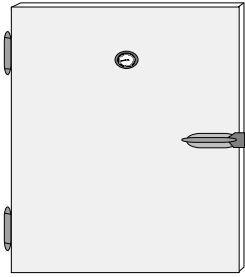
Calibrate each thermometer at least once a month or after a thermometer is dropped.



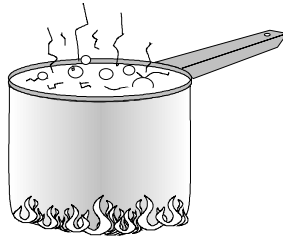
How to calibrate a thermometer

1. Get a glass of ice water (mostly ice)
2. Place the thermometer in the ice water
3. Stir the ice water with the thermometer
4. Leave the thermometer in the ice water until the dial stop moving
5. When the dial stops moving, it should read 32°F (about 3 minutes)
6. If it is not 32°F, then use pliers to turn the nut on the back of the dial until it reads 32°F
7. Place the thermometer back into the ice water and continue steps until it reads 32°F

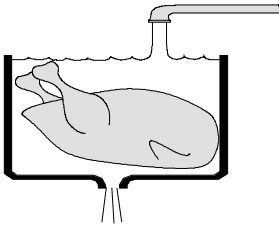
What are the safe ways to thaw frozen foods?



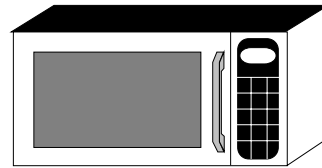
In a walk-in or a refrigerator



As part of the cooking process



In cool running water below 70°F



In a microwave and cook immediately

**Frozen food may not be thawed
at room temperature.**

What if you did not keep food at the proper temperature?

Food that is left in the temperature danger zone (41°F to 140°F) has a shelf life of 4 hours; this includes preparation time. If you leave the food out for more than four hours, the food must be discarded.

What is a potentially hazardous food?

A potentially hazardous food can rapidly grow harmful bacteria when it is not handled correctly.

Potentially hazardous food consists in whole or in part of:



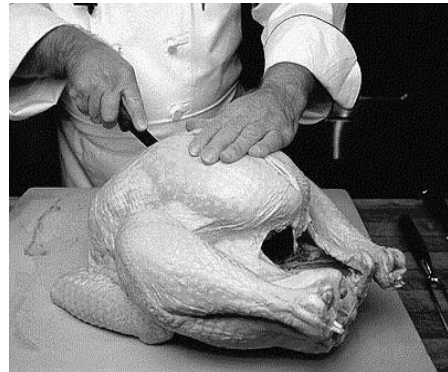
Milk and dairy products



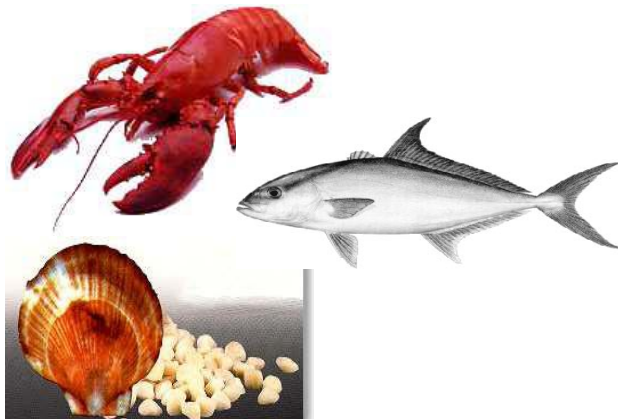
Eggs and egg products



Beef and beef products



Poultry and poultry products



Fish and seafood



Pork and pork products

Potentially hazardous food also includes cooked rice, cooked beans, cooked pasta, cooked vegetables, gravies, soups, baked potatoes, chili, tofu, and fresh garlic in oil.

Pasteurized eggs are safer than fresh shell eggs for use in raw or lightly cooked dishes.

Is ice a Potentially Hazardous Food?

YES! Ice is consumed raw and can transfer bacteria to food or drink.

- ✓ Dispense ice only with a scoop with a handle to avoid hand contact with the ice
- ✓ Clean and sanitize the ice bin regularly
- ✓ Store the scoop and any ice buckets, clean and protected, like all other utensils
- ✓ Do not store anything in ice intended for use in drinks or food preparation, including the beverage cold-plate.
- ✓ Do not run drain lines through the ice.

How do you prevent food from getting contaminated?

Cross contamination is the transfer of harmful bacteria from one food to another by means of your hands, utensils, equipment, or incorrect food storage.

Examples of cross contamination:

- ✎ When you have poor hand washing practices or do not use gloves properly, you may contaminate utensils or cooked foods.
- ✎ When utensils, counters, cutting boards or knives are not sanitized before and after each use, bacteria may get transferred from one object or person to another.
- ✎ When using a cutting board to cut raw meat, you should clean and sanitize the cutting board before using it to chop vegetables.
- ✎ When storing raw meats above raw vegetables, the juices may drip onto the vegetables. The vegetables are now contaminated with the bacteria from the raw meats.

Prevent cross contamination by:

- ✎ Following proper hand washing practices at all times.
- ✎ Restricting employees with flu-like symptoms from working with food
- ✎ Following proper use of gloves
- ✎ Using utensils or disposable gloves when handling food that will not be cooked
- ✎ Using separate utensils for raw and then cooked food
- ✎ Preparing raw and cooked food separately
- ✎ Storing raw and cooked food properly
- ✎ Storing raw meats and seafood below and separate from cooked food and vegetables
- ✎ Using sanitizer for wiping cloths
- ✎ Washing and sanitizing equipment, utensils, and tableware.

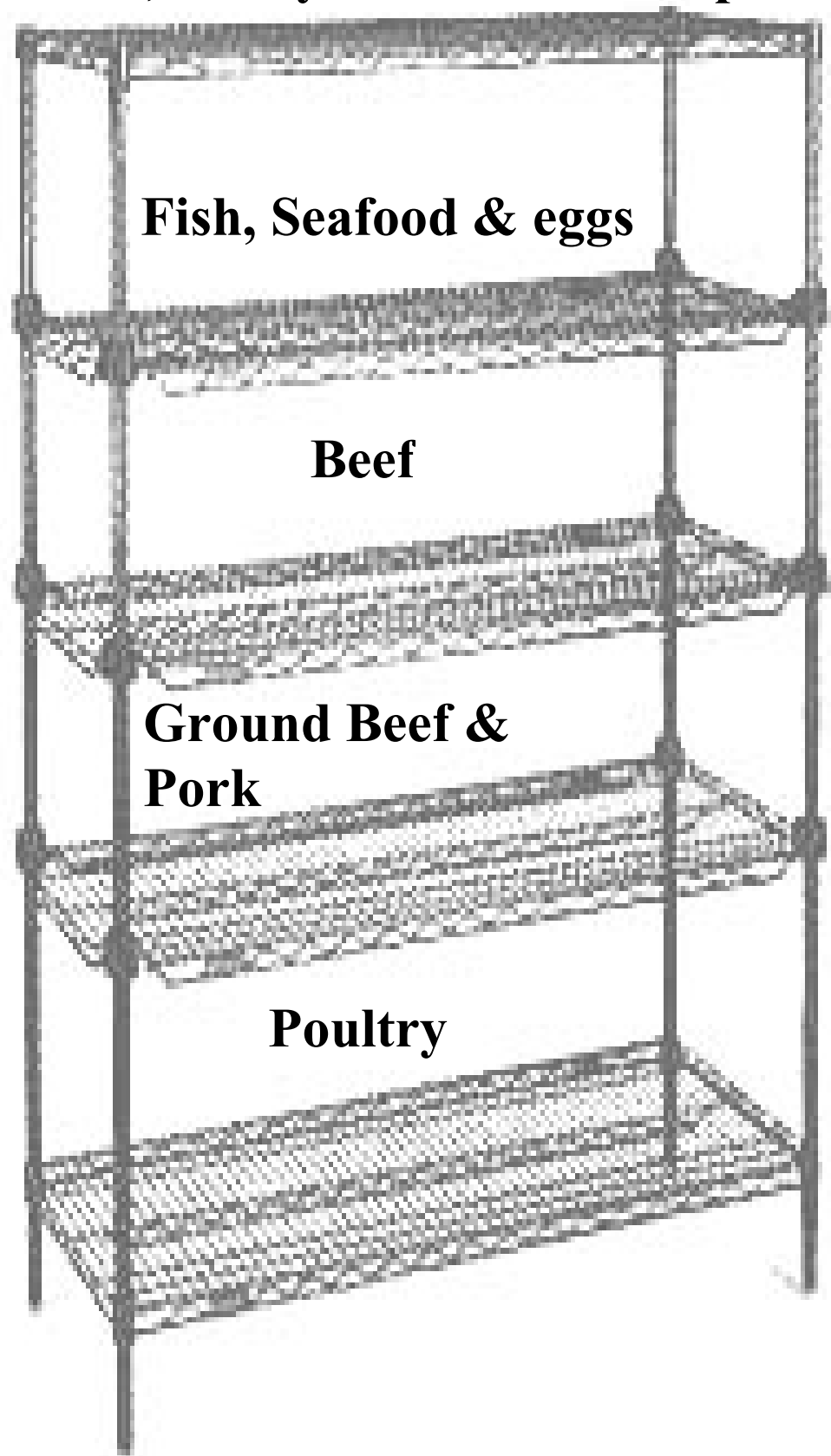
How do you store food safely?

To store food safe and to prevent cross-contamination:

- ✎ Store all food at least six (6) inches above the floor
- ✎ Store food covered or wrapped, as long as it is not in the process of cooling
- ✎ Store food in the refrigerators and freezers in the following order:

F o o d S t o r a g e C h a r t

Cooked, Ready-to-eat food and produce



What is Sanitizer?

Sanitizer is a chemical solution used to minimize and prevent cross contamination. The most commonly used sanitizers are chlorine, iodine and quaternary ammonium compounds (Quats). Degreasers, soaps, detergents, Lysol, Pine-sol, and antibacterial solutions or gels are not sanitizers.

Whatever sanitizer you use, it is essential to:

1. Use it at the correct concentration. Sanitizer should not be greater than the recommended strength since this may cause skin irritations to your hands and it may be toxic.
2. Test the strength of the solution with the correct test strip. Verify chemical concentrations as specified on manufacturer's label.
3. Use warm water, approximately 70°F – 90°F.
4. Use only ONE chemical in a solution. Do not add soap or any other chemicals

Guidelines for use:

Chlorine	50 - 200 PPM	(1 teaspoon to 1 gallon of water)
Quats	200 PPM	(Follow manufacturer's instructions)
Iodine	12.5 - 25 PPM	(Follow manufacturer's instructions)

How do you properly clean and sanitize?

To properly clean and sanitize stationary equipment, you need to:

1. **Wash** it with warm soapy water
2. **Rinse** it with clean water
3. **Sanitize** it with a sanitizer solution at the correct concentration for at least 1 minute
4. **Air dry**

To properly clean and sanitize equipment in the 3-compartment dish washing sink, you need to Clean and Sanitize all parts of the 3-compartment sink (including the drain boards).

1. **Scrape** away visible particles and food debris
2. **Wash** it with hot soapy water
3. **Rinse** it with clean water
4. **Sanitize** it with a sanitizer solution at the correct concentration for at least 1 minute
5. **Air dry**

To properly clean and sanitize equipment in the dish washing machine, you need to:

1. Scrape or pre-rinse away visible particles and food debris
2. Follow the instructions for your dish washing machine.
3. Verify the sanitizer cycle for proper temperature (at least 180°F) or proper chemical concentration.

Show you Know Sample Questions

Try your skills by answering the following questions. Remember, the inspector will be asking you questions, which can be answered orally or through demonstration, plus observing the overall operation.

Our common goal is to minimize and prevent Foodborne Illness. You are doing your part to protect the public when you practice safe food handling each day at your work place and at home.

These are examples of questions you may be asked. All of the answers are found within the booklet. Read the question and formulate your answer. During an inspection you will be asked to demonstrate the task or give an oral answer.

1. What food items are potentially hazardous?
2. How do you calibrate your thermometer?
3. What is the correct cooking temperature for chicken?
4. When should you wash your hands?
5. How do you prepare your sanitizing solution?
6. How do you clean your dishes and equipment?
7. How do you cool five gallons of chicken noodle soup?
8. How do you wash your hands?
9. What is the correct temperature for salad ingredients?
10. What is the correct reheating temperature for green chili?
11. How do you reheat beef stew?
12. When putting chicken in the walk in, where should it be placed and why?
13. How do you acquire ice?
14. What method would you use to thaw a large ham?
15. What is the minimum temperature for holding hot foods?

Resource List

The following organizations provide educational classes. For further assistance for staff or managerial training, please contact:

Denver Department of Environmental Health
Public Health Inspection Division
201 W. Colfax Ave., Dept. 1009
Denver, CO 80202-2558
720-865-5041

Experior Assessments
600 Cleveland Street, Suite 900
Clearwater, FL 33755
1-800-200-6241
www.experioronline.com

Tri County Health Department
4201 E. 72nd Avenue, Suite D
Commerce City, CO 80022
720-322-1508

American Food Safety Institute
One Green Street
Hulmeville, PA 19047
1-800-723-3873

Jefferson County Department of Health & Environment
1801 19th Street
Golden, CO 80401
303-239-5755

Food Safety Compliance Consulting
P.O. Box 706
Orinda, CA 94563
510-222-6642
e-mail: FSCC@home.com

Colorado Restaurant Association
430 East 7th Avenue
Denver, CO 80203
303-830-2972

Front Range Community College
3645 West 112th Avenue
Westminster, CO 80030
303-404-5472

Boulder Health Department
3450 Broadway
Boulder, CO 80304
303-441-1150

Colorado Department of Public Health & Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530
303-692-2000

Training Achievement Program
171 E. Thousand Oaks Blvd., Suite 105
Thousand Oaks, CA 91360
1-888-826-5222
www.tapseries.com

AIKEN GLOBAL ENVIRONMENTAL SERVICES, L.L.C.
1514 East Cleveland Avenue, Suite 107
East Point, Georgia 30344-6967
404-684-7172

SHOW YOU KNOW

IMPORTANT FOOD SAFETY RULES

WASH HANDS
FREQUENTLY AND EFFECTIVELY WITH SOAP AND WATER

COOKING TEMPERATURES

RAW FOODS **MUST** REACH THE FOLLOWING MINIMUM
INTERNAL TEMPERATURES BEFORE SERVING

Poultry, stuffing containing meats	165°F
Ground Beef	155°F
Pork, pork products	155°F
All other Potentially Hazardous Foods	140°F
EXCEPT Rare roast beef/beef steaks	130°F

COOL foods to **140°F to 70°F** in 2 hours; **70°F to 41°F** in 4 hours

REHEAT all Potentially Hazardous Foods **RAPIDLY** to
165°F or above

SAFE HOLDING TEMPERATURES

Hot Foods 140°F or above
Cold Foods 41° or below

SANITIZING PROCEDURES

Manual equipment cleaning procedure:

WASH-RINSE-SANITIZE-AIR DRY

Prepare and use sanitizer solution in food areas
Provide test strips to check strength of sanitizer solution.

Chlorine bleach **50-200 ppm**
Quat solution **100-200 ppm**

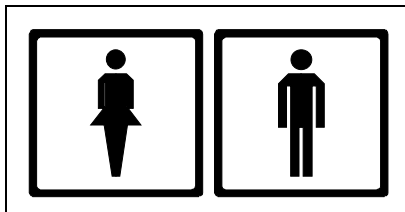


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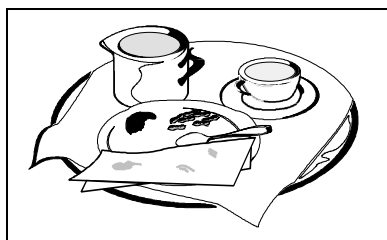
WASH YOUR HANDS AFTER . . .



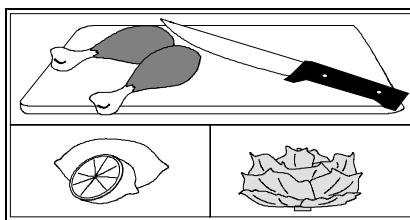
Touching any soiled object or surface,
Soiled clothing, etc.



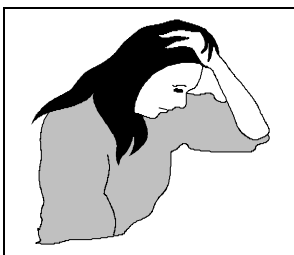
Going to the restroom



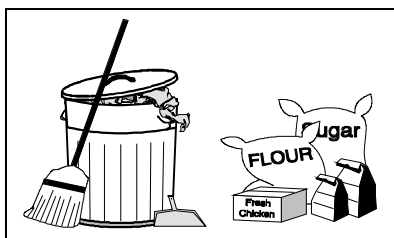
Handling dirty dishes and before
Handling clean dishes.



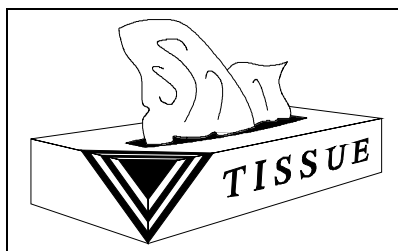
Handling raw food - particularly meat,
Poultry and foods served uncooked.



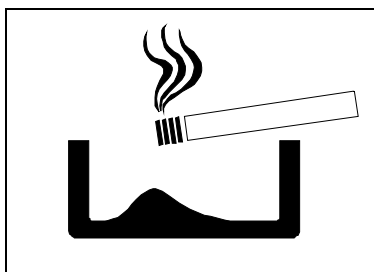
Touching scratching any area of the
body (ears, mouth, nose, hair, etc.).



Cleaning, taking out the garbage,
or putting away supplies.



Using a handkerchief or tissue.



Smoking, eating, or drinking.

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